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PN - JP 09162090 A 19970620 [JP09162090]

TI - SEMICONDUCTOR BASIC MATERIAL AND PRODUCTION THEREOF

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IC1 - H01L-021/02

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AB - PROBLEM TO BE SOLVED: To provide a method for producing a flat SOT basic material having sufficient quality with high reproducibility while saving the resource and realizing cost reduction by reusing the material.

- SOLUTION: The method for producing a semiconductor basic material comprises a step for making porous an Si basic material and to form a porous Si layer 42 at least on the surface thereof, and a step for forming a porous Si layer 44 having high porosity in the porous Si layer 42. The step for forming a high porosity layer can be carried out by injecting ions into a porous Si layer at a specified projection range, or varying the current density at the time of anodic formation during the step for forming a high porosity layer. In this regard, a nonporous single crystal Si layer 43 is grown epitaxially on the porous Si layer 42. Subsequently, the surface of porous Si layer 42 is pasted to a supporting basic body 45 and separated through a porous Si layer 44 having high porosity. Finally, the porous Si layer 42 is removed by selective etching.

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